

B6 10/681,749  
6750-0010

(19)

(11) Publication number:

**01249049 A**

Generated Document.

**PATENT ABSTRACTS OF JAPAN**(21) Application number: **63078605**(51) Intl. Cl.: **A61F 2/38**(22) Application date: **30.03.88**

(30) Priority:	
(43) Date of application publication:	<b>04.10.89</b>
(84) Designated contracting states:	
	(71) Applicant: <b>KYOCERA CORP</b>
	(72) Inventor: <b>NODA IWAO</b>
	(74) Representative:

**(54) ARTIFICIAL KNEE****JOINT**

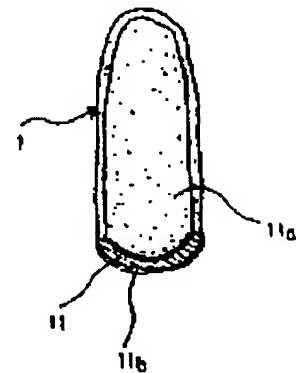
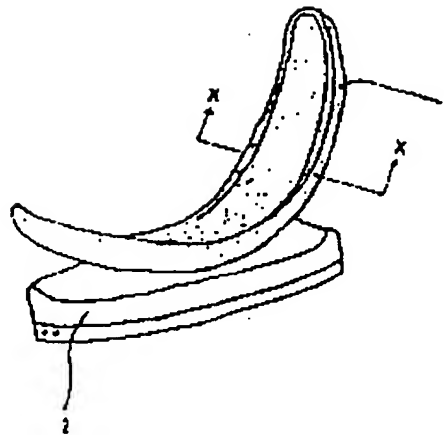
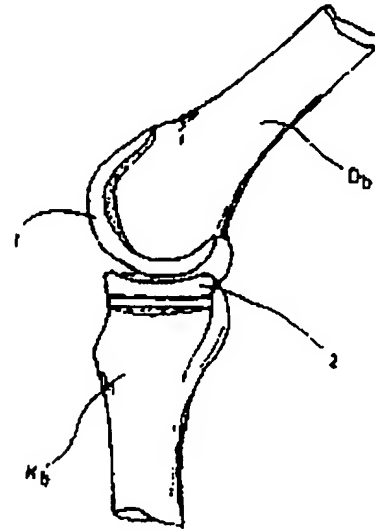
(57) Abstract:

**PURPOSE:** To obtain an excellent hemi-artificial knee joint by coating a metal made base structure of large mechanical strength respectively in its side, coming into contact with a bone, with a vital activator material layer and the sliding side with a wear resisting material layer.

**CONSTITUTION:** A base structure

## BEST AVAILABLE COPY

11 of a joint member 1 is made by metal of Co-Cr alloy, titanium alloy, etc., forming a curved shape easily suited for a thighbone Db in its bone end part shape, and this base structure 11 coats its surface in a side, adapted to the thighbone Db, with a vital activator material layer 11a and the surface in a side, sliding as a joint, with a wear resistance material layer 11b. As a material forming the vital activator material layer 11a coating for firmly connecting the joint member 1 to the bone, hydroxyapatite, vital activator glass and  $\beta$ -TCP(tricalciumphosphate) or these combination may be used. While for the wear resistance material layer 11a coating the surface in the side sliding with a joint member 2 mounted to the shinbone, titanium nitride, titanium carbide, titanium carbide nitride, alumina, etc., are applied.



COPYRIGHT: (C)1989,JPO&Japio